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INSTITUTIONAL RESEARCH AND INFORMATION CONTROL.

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INFORMATION CONTROL SHOULD BE AN INDIVIDUALIZED POLICY WHICH IS DEVELOPED AND MAINTAINED FOR EACH INSTITUTION. THE NEED FOR INFORMATION CONTROL HAS ARISEN BECAUSE OF THE INCREASING NUMBER OF OFFICES AND BUREAUS OF INSTITUTIONAL RESEARCH, THE USE OF COMPUTER TECHNOLOGY, THE INCREASING NUMBER OF STUDIES ON STUDENTS, BUDGET REQUESTS, AND AMOUNTS OF INFORMATION NOW PART OF THE NORMAL OFERATIONS WITHIN INSTITUTIONS. GENERAL PROCEDURES IN INFORMATION CONTROL NECESSARY FOR OPERATIONS AND PLANNING INCLUDE--(1) DESIGNATING A CENTRAL OFFICE WITH THE RESPONSIBILITY FOR ANSWERING DATA INFORMATION REQUESTS, (2) CONDUCTING A COMPREHENSIVE SURVEY OF THE COLLEGE AS TO WHAT INFORMATION IS PRODUCED, WHERE THE DATA AND REPORTS ARE ORIGINATING AND WHERE THEY ARE GOING, AND THE DEGREE OF USE AND COST FOR THE GATHERING, TABULATION, AND PRODUCTION OF DATA, (3) SETTING UP A SYSTEMS APPROACH, (4) DEFINING THE TERMS AND STANDARDS OF REPORTING DATA, AND (5) DEVELOPING A DATA BANK. PROCEDURES FOR CONTROL OF INFORMATION ON STUDENTS MUST ALSO BE DEVELOPED, AND LEGAL CONSIDERATIONS FOR THE DISPOSITION OF STUDENT RECORDS MUST BE CLARIFIED. THIS PAPER WAS PRESENTED AT A MEETING OF THE ASSOCIATION FOR EDUCATIONAL DATA SYSTEMS (DETROIT, APRIL 30-MAY 2, 1967). (HW)

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INSTITUTIONAL RESEARCH AND INFORMATION CONTROL*

A conceptual framework for institutional research and planning within American higher education finds application to a wide diversity of definitions, responsibilities and goals (Hubbard, 1964). Considered in a broad perspective, institutional research is research leading to improved understanding, planning and operation of colleges and universities. Institutional research as a discipline reflects the diversity of higher education, in the academic background of those in the discipline, the research they perform, and the placement of institutional research within the administrative hierarchy (Cowley, 1960). The use of the terms operations research, educational research or administrative research have been used in somewhat the same context as institutional research, sharing many common features of theory and practice. But except for a number of bureaus of educational research, these terms have not been widely formalized and established in higher education, although operations research is a standard feature in industry and business. Institutional research is now a standard fixture within the administrative structure of many colleges and universities and the name and function will continue to increase within institutions of higher education (Mayhew, 1966).

Institutional research is a staff function and not one organized in a line or executive position. The role of institutional research in the formulation of policy is an advisory function, but with the location of offices of institutional research at high administrative management levels, the role of implementation is difficult to avoid. The advisory role is to faculty as well as administrative planning, but the administrative side has been in the past given the most emphasis. The role of institutional research in internal evaluation, as to policies and their implementation, has placed institutional research as a planning as well as an evaluation function. Offices of institutional research

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are primarily involved in research and planning and may become involved with the implementation of policy. The implication is not valid that policy decisions and implementation are done by administrators without those in institutional research or planning becoming involved. The extent that those in institutional research becoming involved in planning and the initiating of implementation may be illustrated in the planning of information control. By planning and coordinating for such a policy on information control one discovers that implementation is at least directed by the research and planning that is necessary for suggested implementation.

Need for Information Control

The increasing number of offices and bureaus of institutional research created during the past decade within institutions of higher education is one factor in the increasing collection and use of data in decision making. Those in the decision making process within higher education are now realizing the need for greater planning for operations. Institutional research has as a central purpose effective research methodology leading toward valid utilization of data. Institutional research personnel have a basic interest in the collection and use of data for planning and evaluation purposes within higher education.

A second factor in the increasing collection and use of data at the university level is the rapid development and use of computer technology. As recently as ten years ago the computer on the university campus was a new development, a useful and promising research tool, but still to some extent a potential one. The concepts of data banks, storage of information and retrieval and storage systems were being formulated but development was hindered by lack of theoretical and operational definitions. Too, the rapidly evolving computer and data processing hardware were making the then present day operations obsolete almost as they were developed. Now the present technology has found a wider acceptance in information processing within higher education, still potential as to what can be achieved in future operations, but a definite change from the 1950's.

A third factor in a concern and development of information is the increasing number of studies on students, either in the rapidly accelerating testing programs or the longitudinal studies of students and institutions (Jacobs, 1957). The national testing programs of College Entrance Examination Board, American Testing Program and National Merit Scholarship Cooperation have provided individual and national norms for institutions of higher education. Testing data have been combined with other admissions variables and used for the study of prediction of academic grades and other socio-psychological variables (Fishman and Pasanella, 1960). CEEB (1965) has recently initiated an institutional research program involving students and institutions' characteristics. The increase in studies of student values, attitudes, and other socio-psychological characteristics have provided a catalyst for development of similar characteristics studies (Sanford, 1962). During the last several years we have seen the beginning of institutional data banks (Miller & Ivy, 1967) and national data banks of institutional and student characteristics for evaluation within higher education (Astin and Panos, 1966). Educational research has been advanced by research "data banks" and professional interest has been shown by the 1964 Harvard Educational Data Bank Conference, the American Educational Research Association 1965 data bank symposium and the 1966 A.E.R.A. preconvention sessions.

A fourth factor in the concern and development in information control has been the increasing use of data by legislative groups, state and federal agencies, and more particularly, the state boards of higher education when used for budget requests. The requests from outside the institution for hard data have forced the college administrator into action. The "good old days" of budget requests outside the context of supporting hard data is almost an event of the past. Whether applying for a grant in student values research, asking capital construction money for a biology laboratory, asking for increased faculty salaries, requires the use of data to support the request (Harris, 1962).

A fifth factor in the problem of information control is the sheer numbers of information or data now becoming a part of the normal operations within institutions of higher education. The increase in data-processing methods and systems applications, particularly in the area of fiscal and student data, have provided a widening application and use of such data. More offices and personnel are becoming involved in and using more data. Planning facilities and budgets have become larger operations,

normal operations involving student data have expanded with increased enrollments and diversified curriculums, and the expanded scope of "big business" in higher education has greatly increased the quantity of information and the control of such information. As more sophisticated data banks and information systems are developed more information will be available to more persons. The expansion of data knowledge and information is rapidly accelerating.

Outside the higher education scene we find that the modern American and developing technology have made it possible to initiate and maintain large files or banks of data concerning individual people and their lives (Congressional Hearings, 1966). National security investigations are a regular user of these files of information, reports are regularly gained from credit or banking records, applications to business employment or educational training. Data for income tax purposes, social security, census work are now filed and computerized. The increased installment buying and prosperity of the American people have increased the information available on these people. The use of data banks on a national scale has now become a concern for congressional hearings (Time Magazine, 1967).

There has been also an increasing concern of students, faculty, administrators, and the general public as to the use and control of data (AAUP, 1965) (ACLU, 1961). The gathering of data, the type of questions asked on applications, the security of such data, have been involved in discussions of student rights, law suits and legal problems (American Psychologist, 1965). The concern of each person is how much information is necessary to efficiently operate an institution, what information should be given for what purpose, what proper safeguards should be used to protect individual rights, and the provision for valid data to be used in decision-making within the institution.

Thus, for the administrators of institutions of higher education and more particularly for those in institutional research, there are a number of major concerns of information control. There is a concern for planning and operations, these cannot be done without information, there still being a serious lack on continuity in data gathering and analysis. Trends, based upon appropriately defined definitions and carefully done enumerations, are difficult to find and equally difficult to initiate and carry to completion. Valid data

is still hard to find but becoming increasingly available. Hard data for budget requests, space requirements and utilization studies, are being done, but only recently are there emerging some trends. The correlation of national, state and local trend data is time consuming but necessary to be fully aware of one's own position in higher education.

While there is a concern for the gap in continuity in data gathering, there is an equally developing concern as to what use and control should be made with that data which we are now gathering or for the future. While many are concerned with the technical question of information storage, there is beyond the problems of storage, cost, systems analysis, and hardware utilization, a number of specific legal and philosophical problems to be encountered. Such legal and philosophical problems are of concern to administration as well as those in computer systems and operations. What are the rights of faculty and students in certain institutional requests for information? What will the effect be of releasing information, testing scores to parents (Goslin, 1967)? Will the lack of certain data at the present time prevent a subsequent request of budget for a research project or building? What will the future hold as to what requests can be legally asked by the institution as part of its operations or what can or must be volunteered data? What will be the problems in gathering material in large surveys or questionnaire studies? The institutional research person might thus find himself between (1) trying to now design and work with new systems of information gathering in order to provide sound data for decision making, and (2) for the future, plan the very difficult task of knowing what use and control of information should be a basis for action within the college. Therefore a responsibility of those in institutional research is to plan and develop a flexible policy on information control. Such a policy will cross the traditional academic and administrative differences, must be compatible with computer and data processing systems and procedures, and be in touch with modern legal practices and underlying philosophy of society.

There then is a definite need for hard data in administrative decisions. Data and trends are necessary for operations and planning. Individual rights are of concern as are the types of data gathered or asked of these individuals. What is the proper and best procedure to achieve both goals?

General Procedures in Information Control

There are a number of general concerns in information control that can be applied to the institution as a whole. Certain procedures can be formulated which can at least be preventative of increasing the confusion of reporting data about the institution, determine definitions and schedules for reporting data, and seek to determine relative policies.

A first step in information control is the designation of a central office with the responsibility for answering requests for data information. Data information may be in the form of questionnaires, requests from state and federal offices and the many other requesting agencies. The office should only serve as a coordinating office for answering questionnaires, it being poor policy to assume one office should answer all requests or be able to answer the varied information requests. The central office can also serve to reduce the time spent in answering duplicating requests for information, particularly in federal and state requests. A centralized office can serve to coordinate and verify the checking of data requests, bring about the reduction of "errors of estimates" made by college personnel who do not really take the time to correctly answer a request, and determine the location of potential trouble areas where errors and duplication may appear. Requests from national and state agencies can be more easily facilitated by reference to a single office on the campus and more importantly one set of data can be given (hopefully the correct data, but consistency has its own rewards). There are several disadvantages for a central coordinating office. Some other offices may assume there is a loss of status if they don't personally answer or an office director may feel knowledge is power and avoid the coordinating task.

However, the advantages of one set of data being sent out from the institution and the savings of time by avoiding duplication in answering is a valid reason for a central coordinating office. Too, the coordinating office can serve as a means of locating potential sources and difficulties in reporting data and scheduling reporting times.

The reporting of faculty and student characteristics, the number of buildings and other numerical counts can be a primary focus of the central reporting office. Requests for

faculty or student characteristics are often duplicates and by reference to previous reports can be handled. Not all reporting of data will be done through questionnaires, thus there is the necessary requirement for coordination and the close working together in reporting data and schedules. Certain budgetary or specialized data may be reported by only one office and may not be given to the institutional research office; only as a file source and not as a primary answering office. Institutional research as a coordinating office may be asked to determine what information is available, which office is responsible for reporting or maintaining records, and what external requests are to be answered. A strong recommendation toward a centralized reporting office is the recent packaging of the U.S.O.E. information packet and sending to one office on the college campus. Strange as it may appear not all questionnaires should be answered. In fact, a regular file of "crank" questionnaires should be maintained, particularly the new college rating fads.

Internally, the planning of systems operations of data control can begin with a comprehensive survey of the college as to what information is produced, why, where are the data and reports originating and where are they going, and the degree of use and cost for the gathering, tabulation, and production of data. The classical story is too often repeated of a data processing center spending two days in producing a report, then finding out that the report was not used and not discontinued by the using office because of not knowing where the report originated. The design for a survey of data forms, sources and requirements is a major step in information control, not overly difficult and for many administrators a very "profitable" phase of determining information sources. Too often control of data sources is allowed to drift and develop without the control of a more centralized planning function. Planning of a "systems approach to data and reports" by data processing or the computing center may be one method to initiate such a survey but too often those offices fail to determine the total information needs of the institution in other than costs or what can be processed on computers.

Ideally, information control includes all reports and data, many of which are not to be machine or computer processed. While a "computer systems approach" is valid and necessary on every campus, there are many other "systems" which exist outside a normally operating computer system and therefore may never be the objective of the total systems approach.

Internally, the administrators can, through the institutional research office, begin a definition of terms and standards of reporting data. The definition of terms should be consistent with state or central boards of higher education definitions (where they exist) but consistent at least within the institution. Too often definitions are never realistically defined within the institution and the descriptive definitions become symbols for committee discussion. Several guides to inter-university control of definitions are available for use and are of primary concern for those working in data systems and higher education (Swanson, 1965). Perhaps those in systems, programming and computer work may indicate a lack of support for the many administrative difficulties in doing a systems analysis of data. The technical details are usually not the main source of difficulty, at least the political and personnel battles take the most time and energy for those who have had the experience of trying to get the many different offices to cooperate in planning information systems.

Last, but not least, there is the data bank concept which for the purposes of this paper shall remain general in definition. The data bank, expensive and time-consuming to initiate, but rewarding in output, is the ultimate operation in data control. The data bank, appearing as a panacea to those hard pressed for data and trends, still remains that which must be tried in order to achieve some semblence of effort and sophistication in data control. The term data bank can, all too often, be used as a planning device or as a control by one office within the institution. The problem of access and input-output for the data rate a topic for another paper.

Information Control on Student Data

The changing nature of student rights (WICHE, 1965) and potential problems of those rights in the development of students' records and data documents should be considered in a more inclusive policy for the gathering, release and storage of data on students. There are many questions and decisions related to what information should be collected, who should use the data, and what procedures need to be determined to allow for effective use of relevant data without difficulties arising from such use.

Student records or data on students is a fundamental function of some personnel and offices within the campus. Data may be quite routine or highly personal and confidential. Data may be that which is used only with computer systems while another may be a hand written note dropped into a file. The function of those personnel working with the data or the institution collecting the data is to provide the proper safeguards and information control in harmony with actual use of the data itself (Ware, 1964). The professional journals emphasize the importance of adequate protection against loss (Burgogne, 1953).

The gathering and use of data on students is a matter of concern for not only the efficiency and cost of such data but the relevancy of the data to that purpose for which it is used. The policy of the institution should be directed toward the establishment of guidelines and practices concerning the gathering of student data, the determination of the function of offices within the college as to their role in information control, and the release of student data and information. This policy is basic to the proper operation of each of the offices within the college and personnel within the offices. Such a procedure and policy may expand upon previous papers or policy regarding control of student data but possibly written by separate units within the institution and definitely lacking a coordinated policy.

A first procedure for control of information on students is in the release of news releases or the release of any student data for public media. All news releases about students for newspapers, radio, television and other public news media outside the institution should be made through the Office of Public Relations, or that office whose responsibility includes the public information function. This office may serve as a coordinating office for data originating in other offices but as such will bear the responsibility for control of news releases.

The release of information concerning student achievement in scholastic honors or sports ordinarily are routinely done in news releases. These require little control since normal information is required. News releases of special cases such as those involved in legal suits, police action, or other negative aspects should only be considered in view of information considered as part of the institution's student record (a public record as defined later). The student record serves as an identification means only and can, therefore, be released with some control of information.

A second procedure for control of information on students is the establishing of five files of student data. These include more than the transcript file as defined by Brown (1967). These files are: (1) official student record as probably maintained in the Registrar's Office; (2) the student personnel record as maintained in the Office of the Dean of Students; (3) the Academic Advisory file as maintained in the Dean's Office or a central advisory file; (4) documents such as counseling files, research data, and other confidential or miscellaneous files; and (5) the placement folder. The first file should represent the public record of the student, open to the public or deemed necessary by those with "an interest to know" (Bakken, 1961). The following records are considered a part of the student's record:

A. Transcript (including the noting of dismissal)
B. Dates of attendance
C. Grades
D. Auxillary campus activities such as scholastic clubs or athletic endeavors (no listing of membership in organizations)

The Office of the Registrar should maintain a standard set of rules governing the public file (Gowan, 1958). The release of the transcript is only done to other organizational groups such as other educational institutions, state and federal agencies, or other requesting groups (Goodhartz, 1958).

The release of the student's public record is undergoing some distinct changes with the present draft status dependent on grades and class rank. Some colleges (Columbia) have discontinued rank in class as a means of providing draft boards some criteria of scholarship. Legal statues regarding such release of student information are difficult to determine but probably if the record is to be released, the student should approve the release of his record. There seems to be no legal action that can be taken against the college if the record is released; that is the college has a legal right to release the student's public file record to other colleges, employers, government and legal agencies.

However, all such release of information concerning the student's record must be placed in the context of rapid change. The release of information by the institution is protected against suit and libel as long as the sharing of information is done by an appropriate person, acting in good faith and not motivated by malice (33 American Jurisprudence). Court cases (Kenney vs. Ginley, 1928) have shown a recognition of protection for the institutional official. The personal liability of

of officers or employees has no general rules as was determined in the case of Morris vs. Nowotny (1960).

For the protection of the institution a standard procedure is the establishing of a placement record containing the public record and other appropriate data, released by the individual for employment and application purposes and offering a means of centralizing graduate and alumni records under a standard release format. This format can be used to future advantage when released data is necessary for other purposes since the student has released the file for almost general purposes.

The student personnel record will contain the majority of housing reports, disciplinary action, testing and admissions data, student activities, and other information gathered for employment and student activities. The record should be one of a semi-confidential nature -- released internally but not released to outside agencies or persons. This record should be an operations file, maintained for the purpose of a centralized report but either destroyed or merged with another file when the student leaves or graduates. Much of the information in the student personnel record is concerned with routine filing reports; these can be destroyed with little thought to becoming important data. Any other information can be placed in the placement file, but only after release by the student.

The Academic Advising file may be similar or a part of the Student Personnel file in many institutions. It, too, will be destroyed or merged into a placement file after release by the student. Actions taken by the academic personnel and entered in the file should be destroyed under special conditions and again the file would be treated as semi-confidential.

The fourth file is of special concern since the area of research files is becoming a factor in studies of student and institutional characteristics. Primarily the research file can be characterized by being a confidential file, as such is a permanent file. Such a file of data can pose several problems in releasing of student data. First, the information placed in the research file or data bank is justly confidential, both within the institution and to the public. Such information may be legally subpoenaed under court order but must be specifically mentioned since many court orders specify only the official student record. If the file is subpoenaed, then there is no legal liability for officials of the institution. Thus research files are best regulated to data banks and held as confidential material for research purposes only.

Information contained in counselor files are privileged only in certain states (Blackwell, 1961) and to certain designated psychologists. Counseling notes and data can be also subpoenaed by court order but again only after specific designation of not being privileged. Confidential data under the privileged communication status cannot be legally placed in court.

The Placement file is one designed to serve the purpose of employment and recruitment. The file should be determined as public record, released by the student, maintained by the college, and released to those persons or agencies who have an interest to know, generally designated by the student.

In the case of released data to any outside agency the institution would be properly safeguarded to obtain a release by the student or parent. Matters of information should not be communicated unless the communication is made to the third person who has an interest in the information communicated. Inquiry made about a student is generally considered as privileged provided the communication is made confidentially and in good faith and from one having an interest in the information sought.

Released information about students to parents or relatives can be protected against libel or slander legal action. An administrator, counselor, or faculty member, if acting for the best interest of the student and according to his best judgment, may be protected by the privileged communication ruling. However, in such a case the writing of such notices should be done by the Dean of Students and not by every faculty and administrator who feels the compulsion to do so. Official documents expressed in careful terms are a sound protection against law suits when an irresponsible instructor writes a poorly stated but libel letter.

The disposition of student records has varying legal circumstances as to being maintained, held by the institution, or destroyed (AACRAO, 1960). State law may require a specific time limit before certain records may be destroyed. The public record, as defined here, is to be maintained permanently. The Student Personnel file should be set apart from the student's public record file, if possible, so that it may be destroyed. If not possible, the file will be maintained to fit state laws but only after being purged of any personal data.

Policy Plan for Office Operation

The operation of the college depends to a large degree on adequate communication among offices and departments. Communication, to be effective, is a very real problem on any campus and the subject of much effort to keep communication channels open. There are a number of operating policies and procedures for each office and department which will provide control of information while maintaining communication.

The center of the communications network is the data processing center where operations may be a part of highly developed systems to paper records. A general rule for data control is that any release of information, either in reports or data banks, be restricted to that office which initially produces the data or to a listed file of users of the data. Certain offices may have no restriction in receiving any reports, i.e., the president's office,but such is an uncommon practice. Therefore, data processing should formulate a policy where each report or listing is to be given to only certain offices. While there may be few legal difficulties involved, administrative problems in restriction and control are facilitated by such a policy.

The Registrar's Office functions with a safeguard of the student's official record. The control of information is to maintain the official file accurately and safely. Release should be to other organizations of similar purpose or at the request of the student, absolutely so after the graduation of the student.

The Office of Admissions should not maintain actual student files beyond a yearly operation. The testing data and high school records should be sent to the Academic Advisor file or Student Personnel file and eventually be found in data banks or destroyed.

The research files found in various research offices should be centralized and maintained as confidential files. Too often research on studies conducted in the name of research are done, stored, and allowed to be destroyed or indiscriminately handled. An institutional policy concerned with use and control of these research studies and files should be enforced but the rights of research and academic freedom by the researcher finds the problem one of difficulty.

Summary

The policy and operations involved in information control of student data can be generalized to faculty characteristics, budget figures, salary figues, testing scores, and other information. A centralized report office can coordinate most of the requests for such information. Individual offices can, within the function of their own offices, provide data to those outside the institution.

Information control should be an individualized policy for each institution but a policy should be developed and maintained. The times of change in student and faculty relationships, the concerns in national groups, development of data banks and computer technology, have all given a sense of urgency toward a policy of information control.

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